



ILLUSTRATED PARTS LIST

For Model 248 Automotive Dynamometers

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Illustrated Parts List for Model 248 Automotive Dynamometers.

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MODEL 248 ILLUSTRATED PARTS LIST

This document provides illustrations and part number listings for the model 248 automotive dynamometer (dyno) including:

part number	dynamometer model
81148200	248H Generic Car Dyno
81148300	High speed 248HS Dyno
811484	heavy wide 248HW Dyno
248H-102	48" High Inertia Dyno
248HW-102	248 Wide Car Dyno
448-4WD	248/248-4WD Dyno
264111001	Proportional Air Brake

Document Part Number: 98100001

Version 1

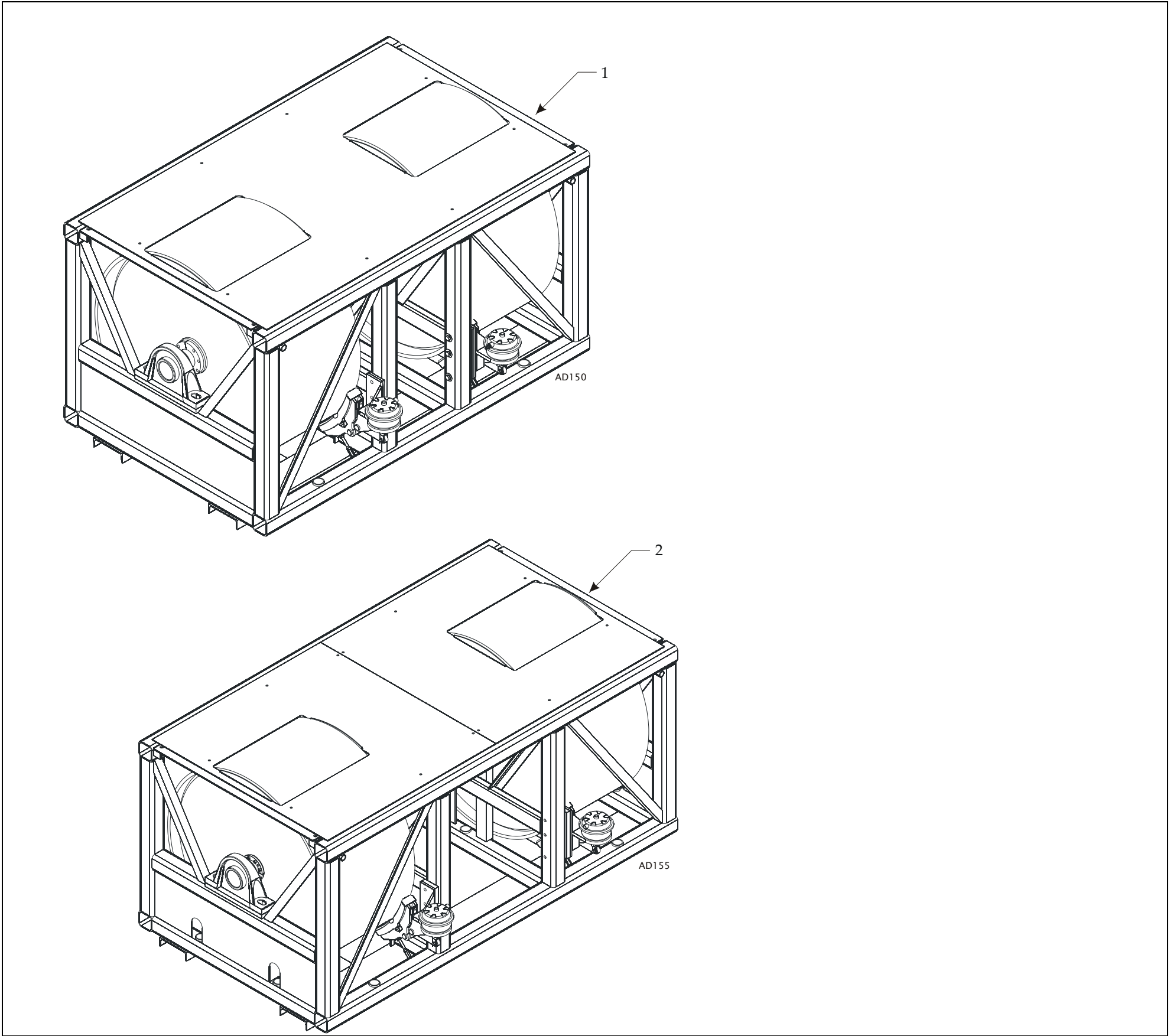
Last Updated: 10-24-06



MODEL 248 OVERVIEW

- Models using the 248 Dyno:**
- 1 81148200 248H GENERIC CAR DYNO, SEE PAGE 2
 - 81148300 HIGH SPEED 248HS DYNO, SEE PAGE 3
 - 2 81148400 HEAVY WIDE 248HW DYNO, SEE PAGE 4
 - 248H-102 DYNOJET 48" HIGH INERTIA DYNO, SEE PAGE 11
 - 248HW-102 248 WIDE CAR DYNO SEE PAGE 13
 - 448-4WD 248/248-4WD DYNAMOMETER, SEE PAGE 13

- Accessories**
- 64111001 PROPORTIONAL AIR BRAKE, SEE PAGE 8

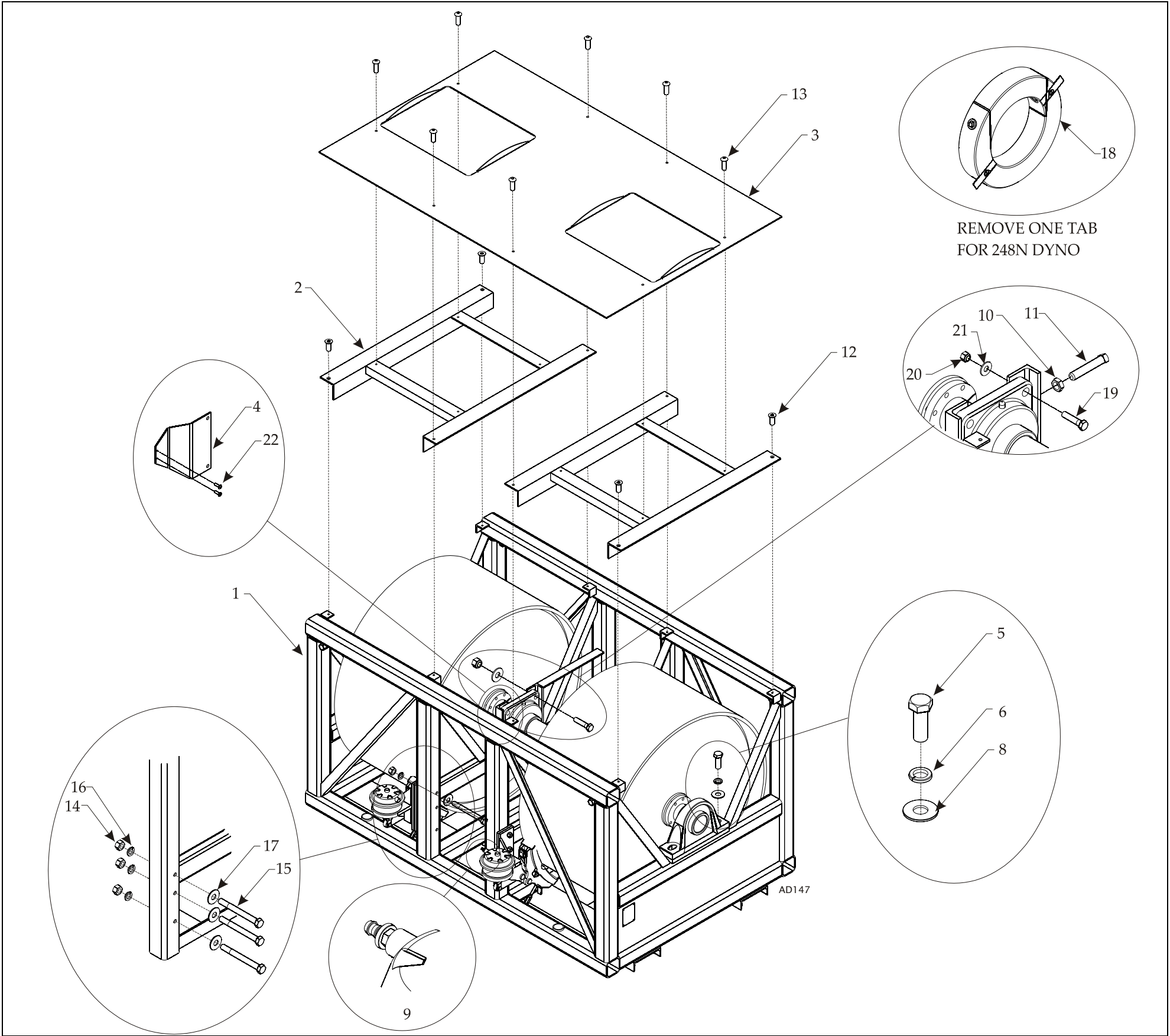


248H GENERIC CAR DYNO

81148200	248H Generic Car Dyno
1 248C-200F	FRAME, AUTO DYNO
2 C2004	H-FRAME WELDMENT, 248 (2)
3 C2008	SMALL COVER, 248
4 248C-353M	BRACKET, PICKUP, CAR
5 1 X 2.75 BOLT	BOLT, 1" X 2.75 (4)
6 1" LOCKWASHER	1" BUSHINGS (4)
7 1" NUT	NUT, HEX, 1" (12) SHIPS LOOSE, USED TO ATTACH DYNO TO ANCHOR (NOT SHOWN)
8 1" WASHER	WASHER, FLAT, 1" (8)
9 10006B-106	FITTING, BARB, MALE PIPE RIGID (2)
10 3/8 HALF NUT	NUT, 3/8" UNC, HALF (12)
11 3/8 X 2 SET SCR	SCREW, SET 3/8-16 X 2", SQUARE HEAD (12)
12 36580814	BOLT, 3/8-16X1/2", FLAT HEAD-ALLEN (4)
13 36581634	BOLT,3/8-16X1", BUTTON HEAD, ALLEN (8)
14 36721100	NUT, 5/8-11UNC, HEX (6)
15 36824840	BOLT,5/8-11X6",HEX (6)
16 36952100	WASHER,5/8",SPLITLOCK,STEEL (6)
17 5/8 WASHER	WASHER, FLAT, 5/8" (6)
18 61318101	TWO-TAB COLLAR ASSEMBLY
19 7/8 X 3 BOLT	BOLT, 7/8-9 X 3" (8)
20 7/8" LOCKNUT	NUT, LOCK, 7/8, NYLON INSERT (8)
21 7/8" WASHER	WASHER FLAT, 7/8" (11)
22 8-32 X .5 SCREW	SCREW, MACHINE 8-32 X 1/2" (10)

THE FOLLOWING ITEMS ARE NOT SHOWN:

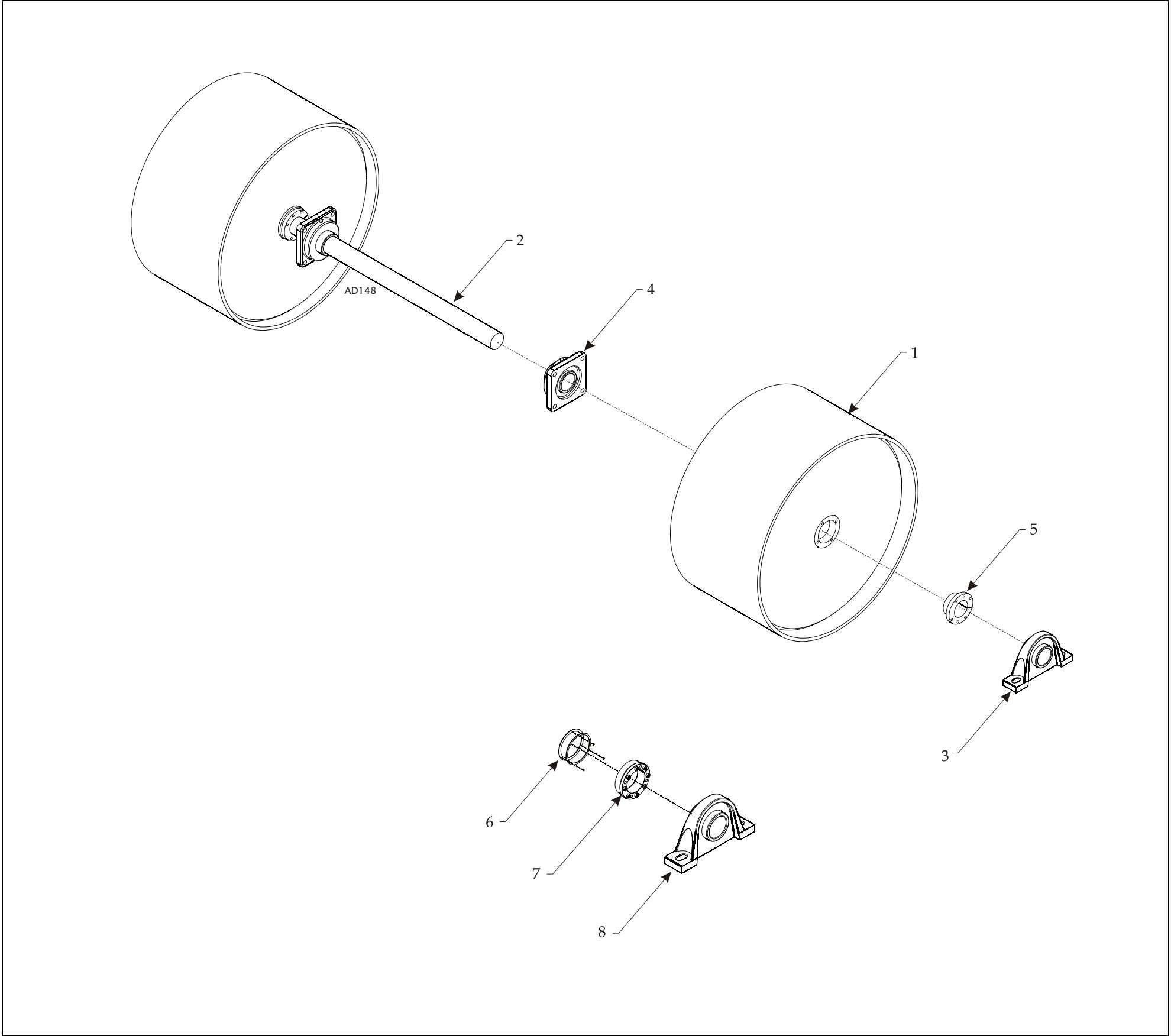
36449100	NUT, 8-32, FLANGE, STEEL (4)
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248H GENERIC CAR DYNO (CONTINUED)

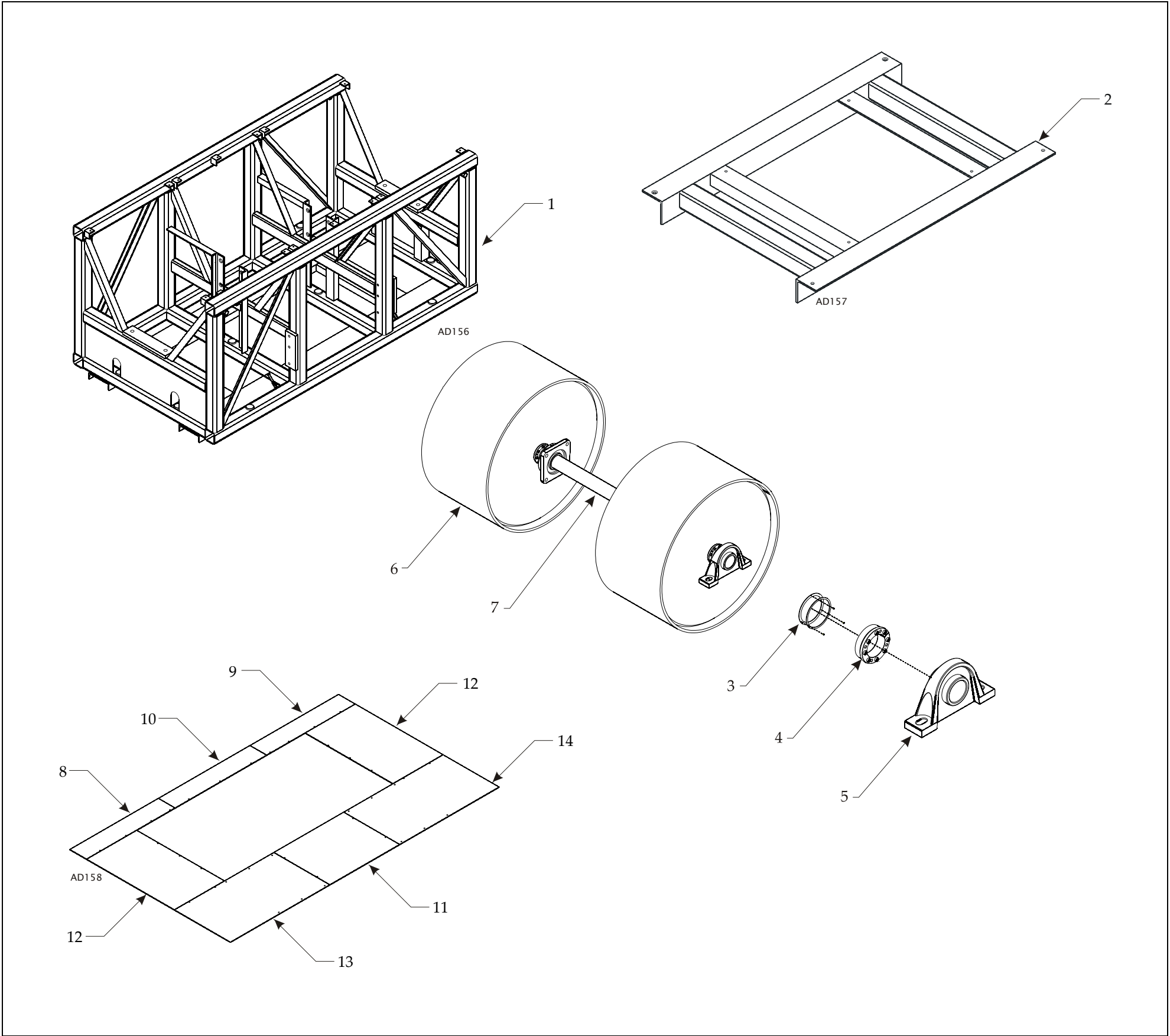
- 1 248C-344RTK HI-INT DRUM, TURNED & KNURLED (2)
- 2 SHAFT SHAFT, 3 15/16 X 89.5"
- 3 VPS363 BROWNING BEARING (2)
- 4 VF4S-363 FLANGE BEARING (2)
- 5 XTB40 TAPER LOCK, 3 15/16" (4)

- 81148300 248 High Speed Generic Car Dyno uses:
- 6 72213001 SPACER ASSEMBLY, B-LOK, HS-DRUM (4)
 - 7 32410820 COLLAR, B-LOCK, 3-15/16" (4)
 - 8 32306126 BEARING-PILLOW BLOCK, MP-63 (2)
 - 32305126 BEARING-FLANGE, MSF-63 (2)
 - 29270006 MOD-248 HIGH-SPEED DRUM, KNURL (2)



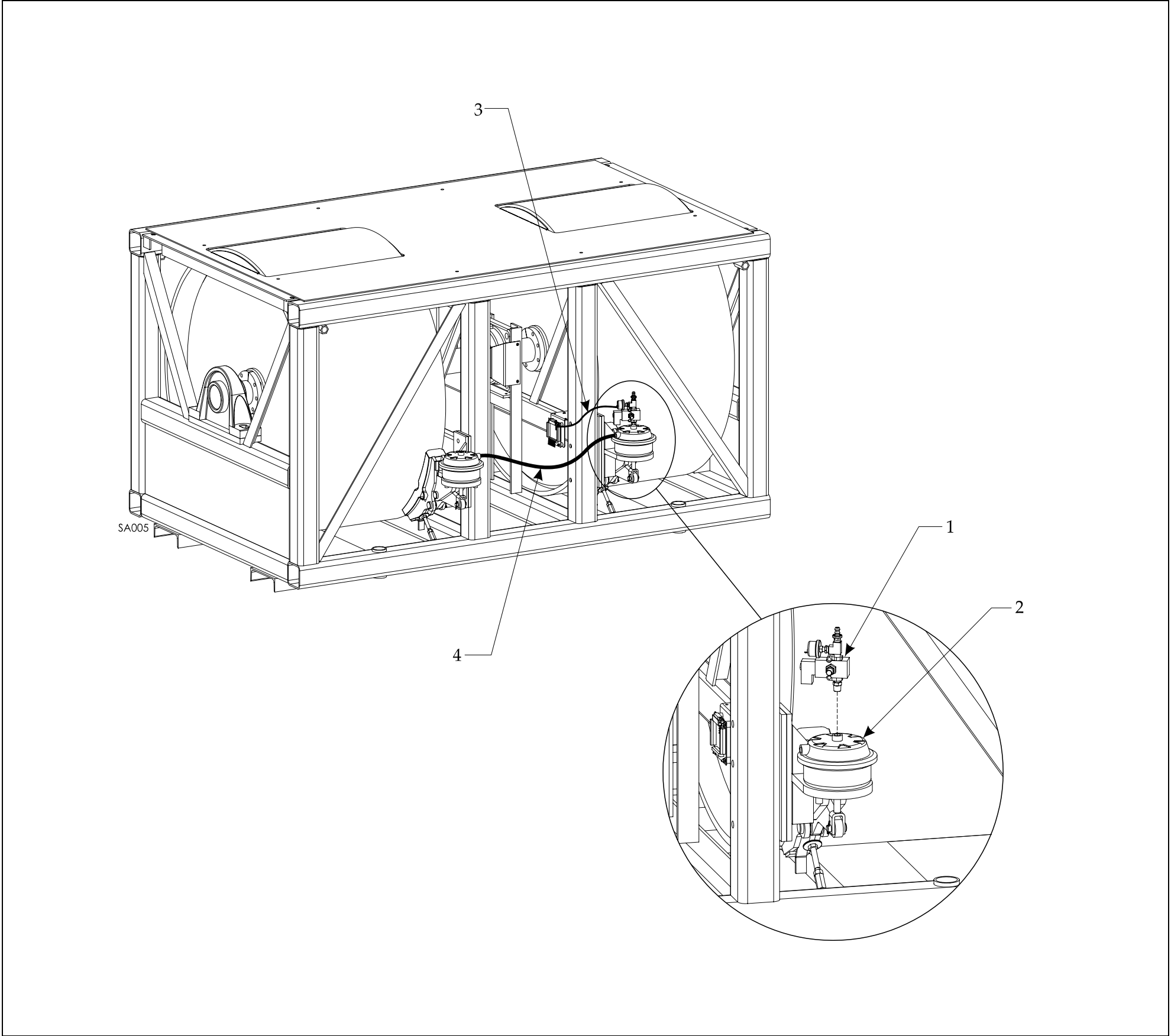
248HW HEAVY WIDE GENERIC CAR DYNO

81148400		248HW Heavy Wide Generic Car Dyno uses:
1	61116810	FRAME, 248HW-102 DYNO
2	61116180	H-FRAME ASSEMBLY, 248HW (2)
3	72213001	SPACER ASSEMBLY, B-LOK, HS-DRUM (4)
4	32410820	COLLAR, B-LOCK, 3-15/16" (4)
5	VPS363	BROWNING BEARING (2)
	VF4S-363	FLANGE BEARING (2)
6	29270007	MOD-248 HI-SPEED TO HW DRUM, KNURL (2)
7	22139990	SHAFT, HW-DYNO
71116180		248 Heavy Wide Pit Cover Assembly, 248HW-102
8	21219504	COVER, LEFT PIT NON-BRK SIDE, 248HW
9	21219505	COVER, RIGHT PIT NON-BRK SIDE, 248HW
10	21219506	COVER, CENTER PIT NON-BRK SIDE, 248HW
11	21219507	COVER, CENTER PIT BRK SIDE, 248HW
12	61119180	COVER ASSEMBLY PIT SIDE, 248HW (2)
13	61119181	COVER ASSEMBLY LEFT PIT, BRK SIDE, 248HW
14	61119182	COVER ASSEMBLY RIGHT PIT, BRK SIDE, 248HW



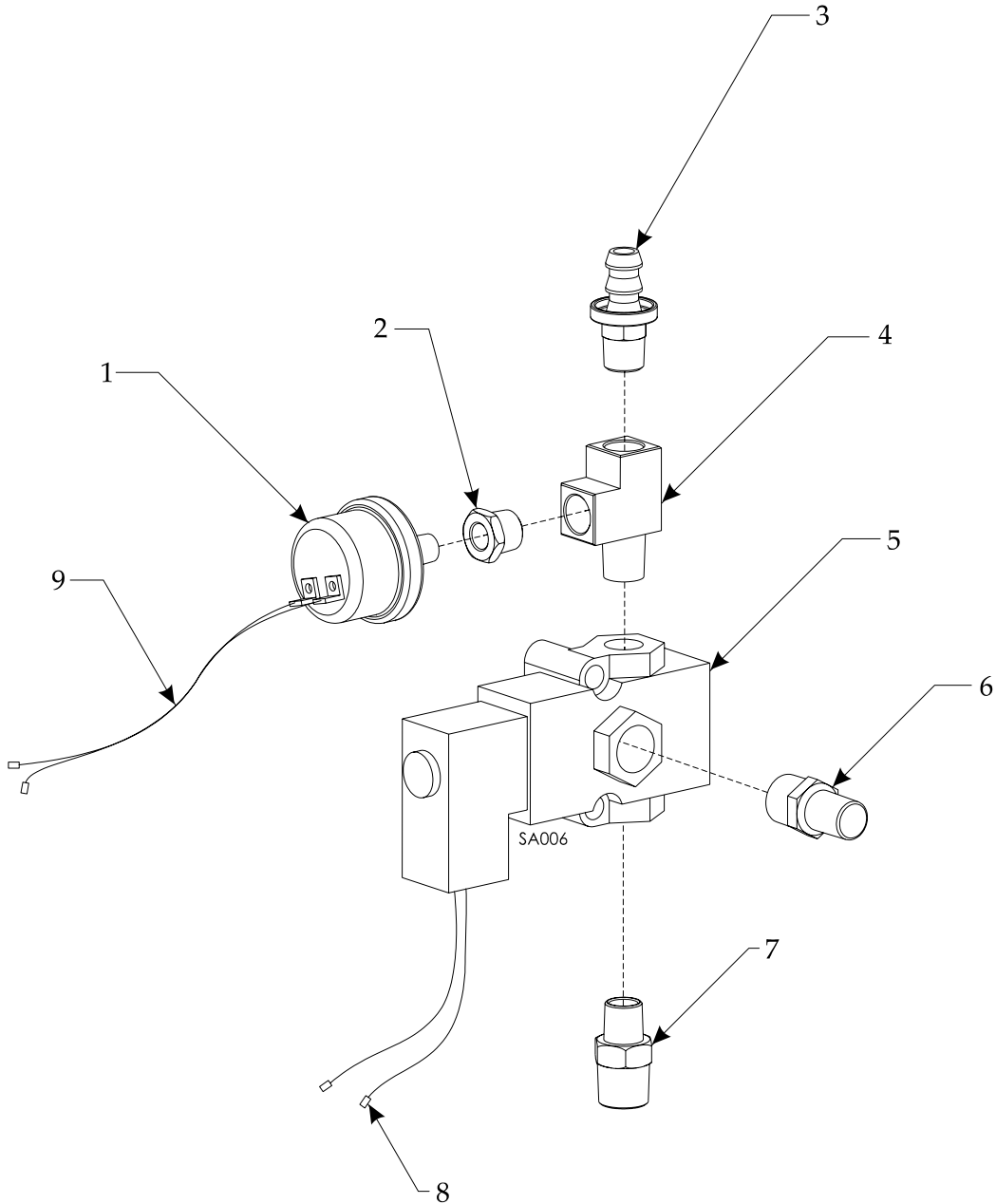
STANDARD AIR BRAKE
.....

- 1 64111003 BRAKE SOLENOID SUB-ASSEMBLY (AIR BRAKE CONTROL SWITCH) REFER TO PAGE 6
- 2 C2003A BRAKE ASSEMBLY REFER TO PAGE 7
- 3 66912001 WIRE HARNESS, PRESSURE SWITCH
- 4 021120501 HOSE, 3/8", LENGTH 27"



STANDARD AIR BRAKE—AIR BRAKE CONTROL SWITCH
.....

64111003 Brake Solenoid Sub-Assembly (Air Brake Control Switch)		
1	145750001	SWITCH, PRESSURE, 1/8NPT/40PSI
2	141821201	BUSHING
3	141900001	FITTING, 10006B-104
4	141622201	STREET TEE
5	24310201	VALVE, 55B-21-PI-550CAAD
6	145000001	MUFFLER P38
7	34141323	REDUCER, NIPPLE, 3/8" X 1/4"
8	44997102	FERRULES, 18 AWG YELLOW (2)
9	66912001	WIRE HARNESS, PRESSURE SWITCH

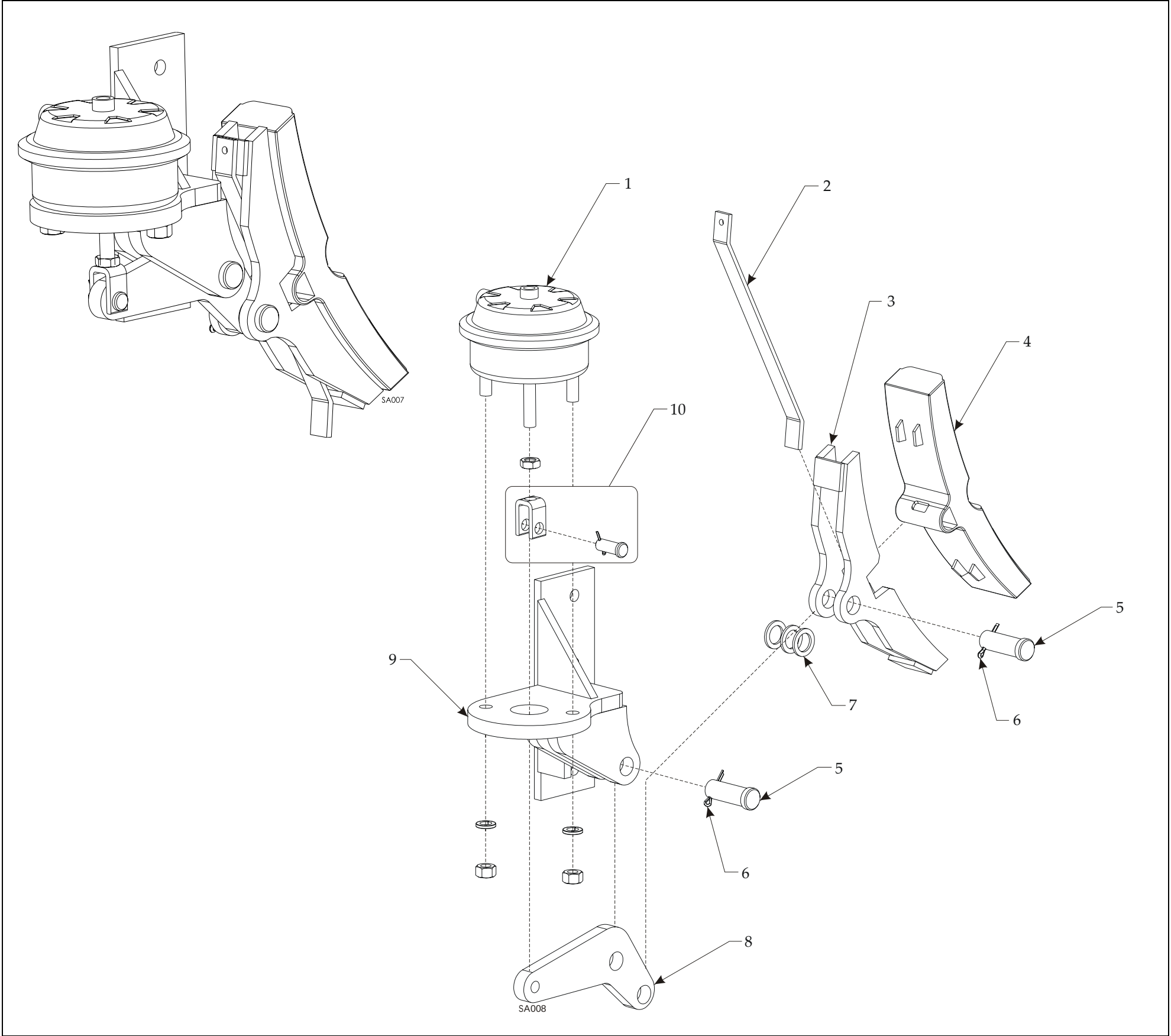


Standard Air Brake—Air Brake Control Switch



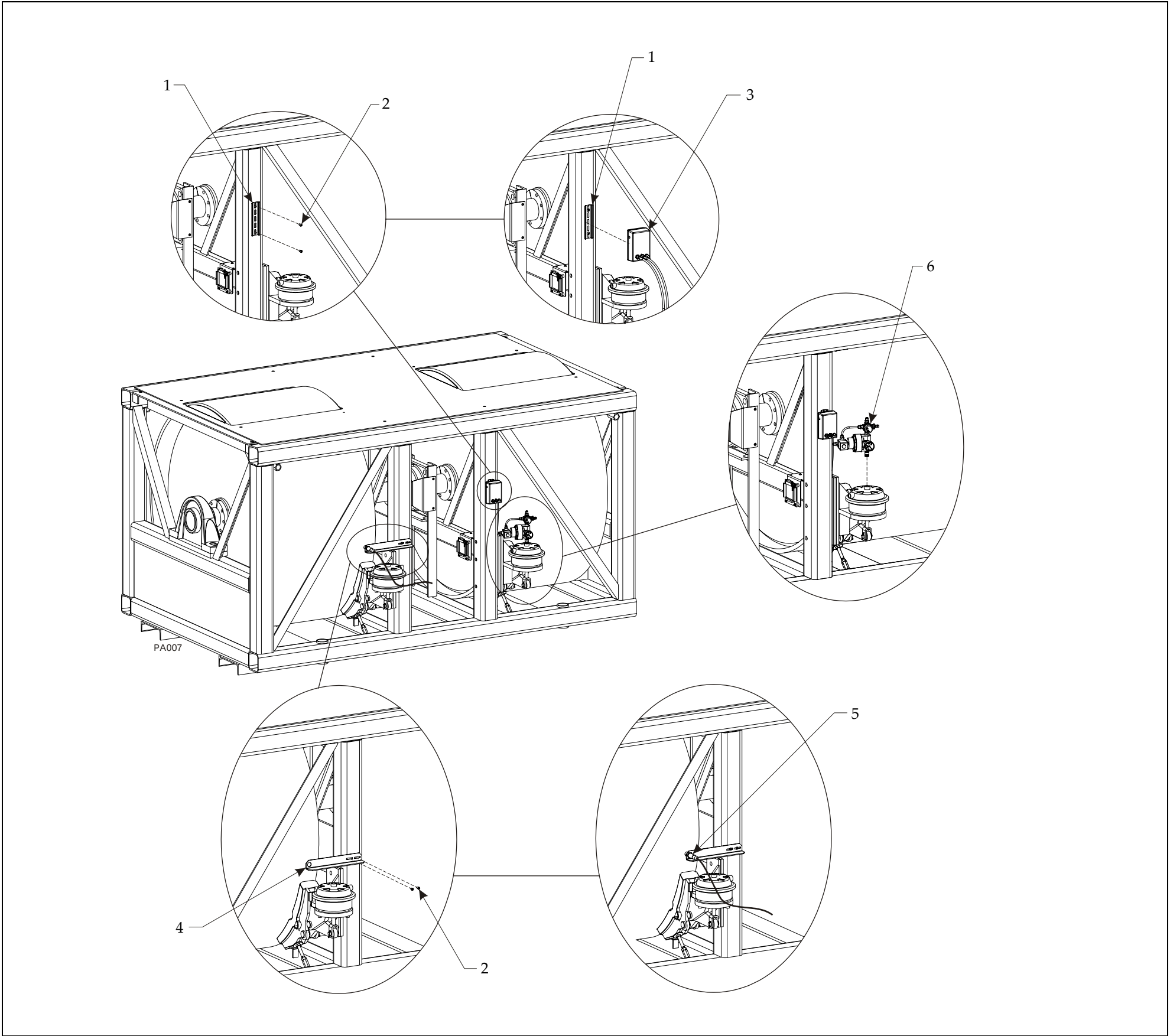
BRAKE ASSEMBLY

C2003	Brake Assembly-Left (not shown)
C2003a	Brake Assembly-Right
1	2400-SC-OEM AIR CAN, BRAKE INCLUDES MOUNTING HARDWARE
2	C20035 RETAINER, 248 BRAKE
3	C20033 BRAKE HEAD WELDMENT, 248
4	T167-4 BRAKE SHOE
5	1X2.75 PIN CLEVIS PIN, 1" X 2.75" (2)
6	3/16X1.5 COT COTTER PIN, 3/16" X 1.5" (2)
7	1" BUSHING BUSHING, 1" MACHINE (3)
8	C20034 LEVER, BRAKE ASSEMBLY, 248
9	C20032 BRAKE WELDMENT-RIGHT, 248
10	19101 CLEVIS KIT
C20031	BRAKE WELDMENT-LEFT, 248 (NOT SHOWN)



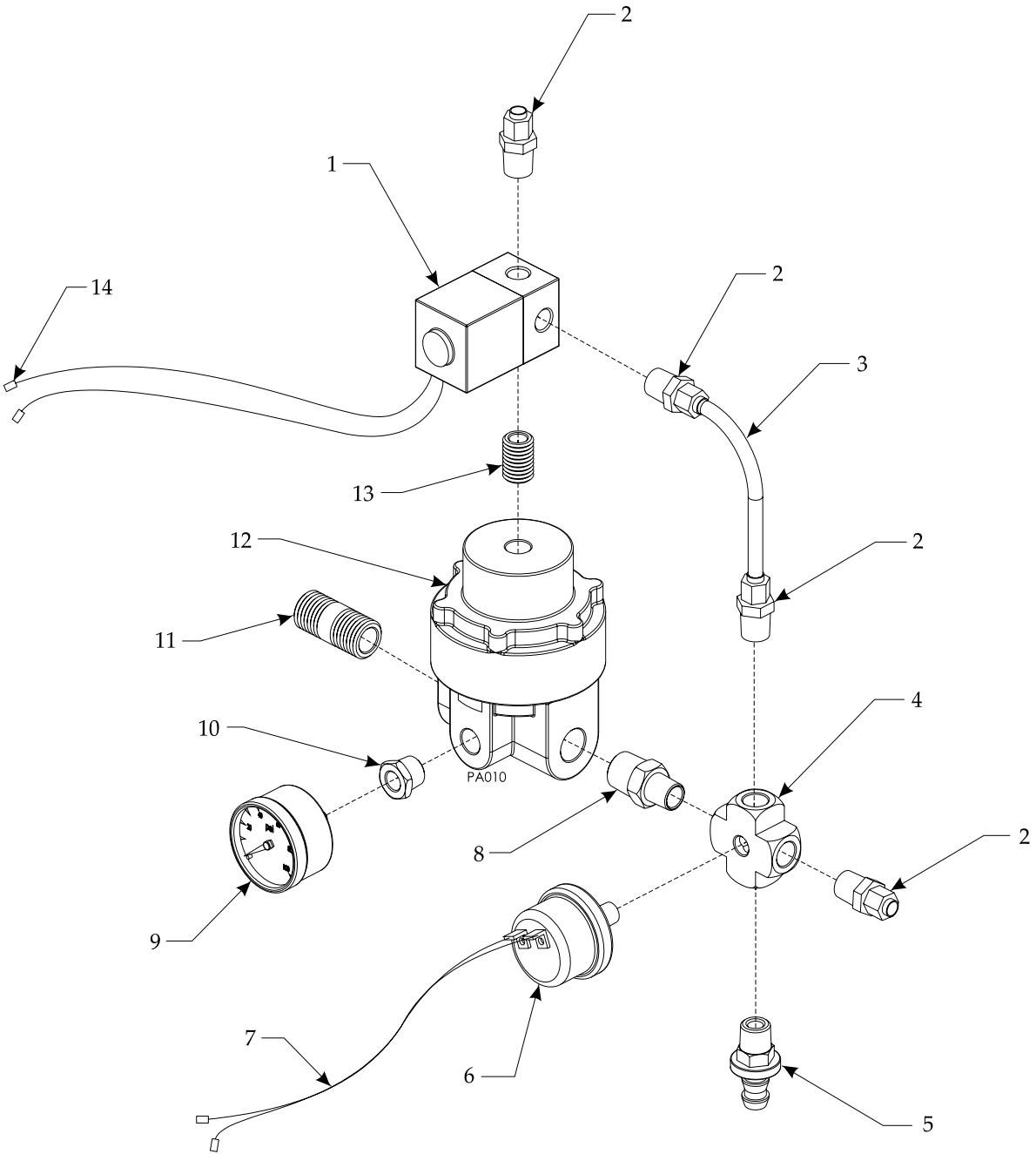
PROPORTIONAL AIR BRAKE, ACCESSORY
.....

- 1 31614100 DIN RAIL
- 2 36560834 SCREW, 1/4"-20 X 1/2", BUTTON-HEAD (4)
- 3 64111002 CONTROL VALVE ASSEMBLY
(ELECTRONIC PRESSURE REGULATOR (EPR),
BUZZMATIC)
- 4 21619200 TEMPERATURE SENSOR BRACKET
- 5 44997101 TEMPERATURE SENSOR
- 6 64111001 PROP AIR REGULATOR SUB-ASSEMBLY
SEE PAGE 9



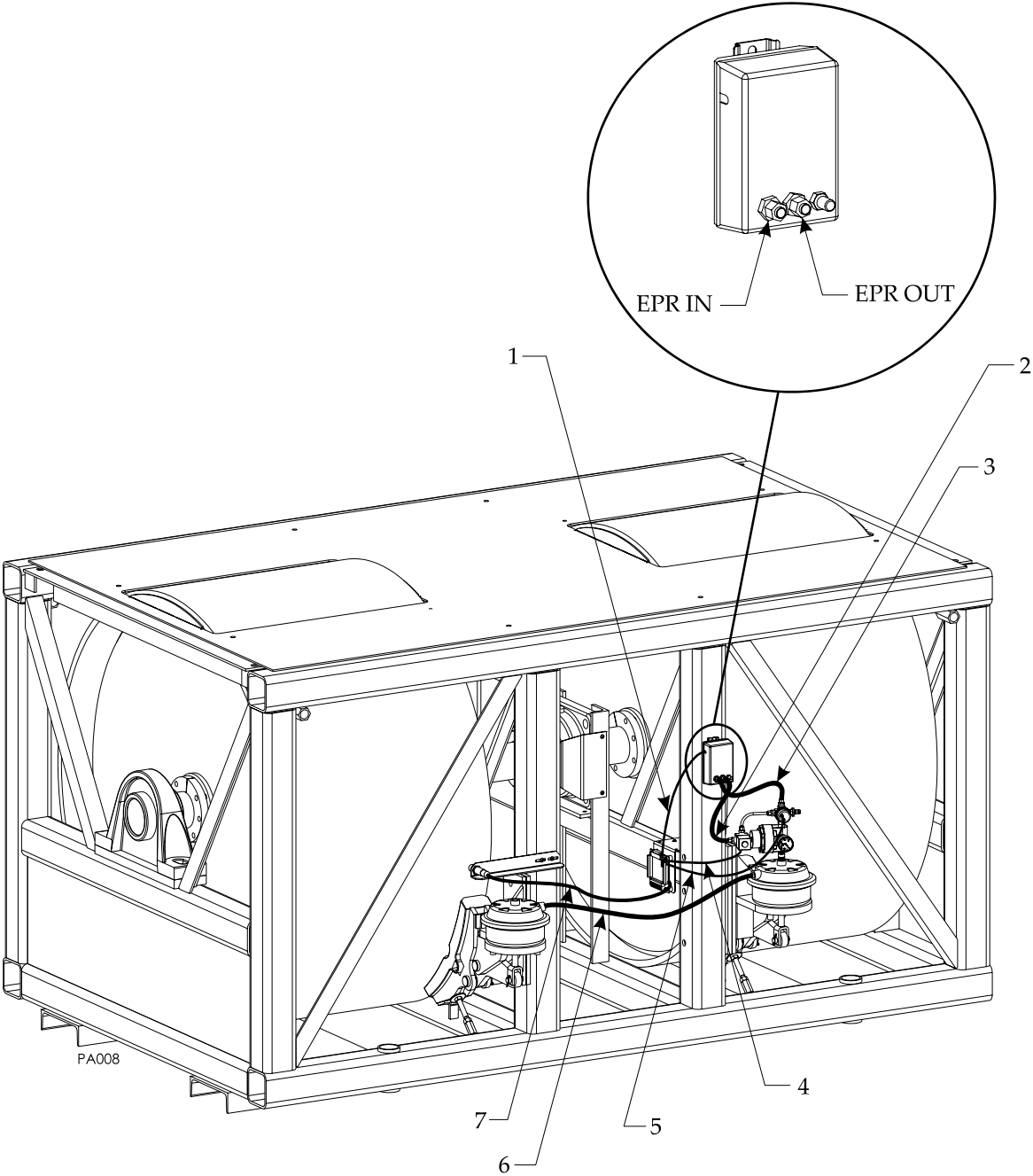
PROPORTIONAL AIR BRAKE—PROP AIR REGULATOR
SUB-ASSEMBLY

64111001 Prop Air Regulator Sub-Assembly		
1	24310401	VALVE, AIR BRAKE
2	34111222	FITTING, 1/4" TUBE - 1/4" PIPE (4)
3	11108700	TUBING, 1/4", NYLON, BLACK
4	29913000	MODIFIED CROSS, ADD 1/8" NPT HOLE
5	141900001	FITTING, 10006B-104
6	145750001	SWITCH, PRESSURE, 1/8" NPT/40 PSI
7	66912001	WIRE HARNESS, PRESSURE SWITCH
8	34141323	REDUCER, NIPPLE, 3/8" X 1/4"
9	145800001	GAUGE, PRESSURE, 100 LB
10	141821201	BUSHING
11	34131333	NIPPLE, 3/8" X 1 1/2", BRASS
12	34328001	REGULATOR, AIR FLOW, ZR-3
13	34131222	NIPPLE, 1/4" X 7/8", BRASS
14	44997102	FERRULES, 18 AWG YELLOW (2)



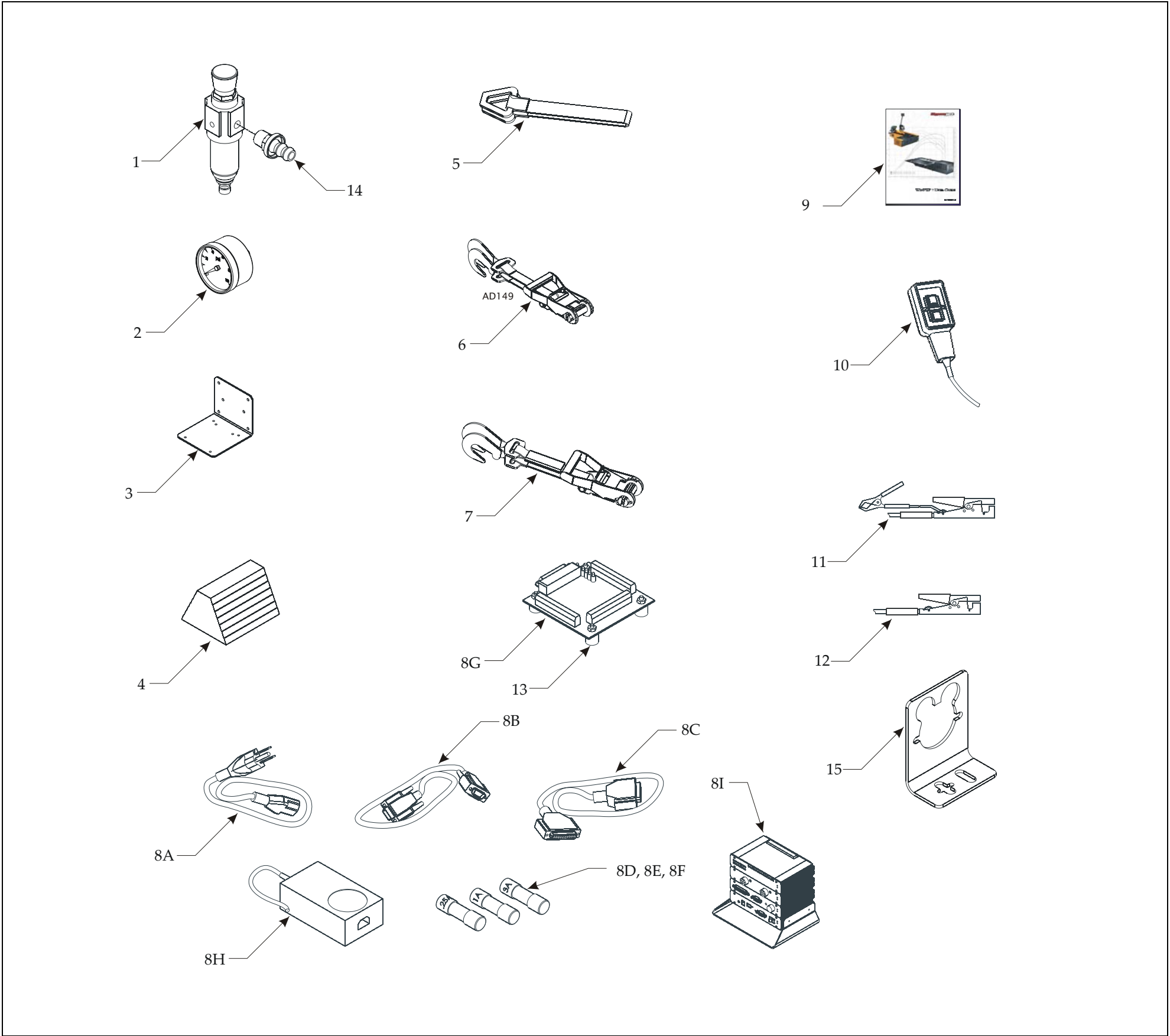
PROPORTIONAL AIR BRAKE—CABLES AND WIRES

- 1 66914001 WIRE HARNESS, BUZZMATIC (EPR)
- 2 11108700 TUBING, 1/4", NYLON BLACK (EPR OUT)
- 3 11108700 TUBING, 1/4", NYLON BLACK (EPR IN)
- 4 BRAKE SOLENOID WIRES (PART OF 24310201, VALVE)
- 5 66912001 WIRE HARNESS, AIR PRESSURE SWITCH
- 6 021120501 HOSE, 3/8", LENGTH 27"
- 7 49950030 TEMPERATURE SENSOR AND CABLE



48" HIGH INERTIA DYNO

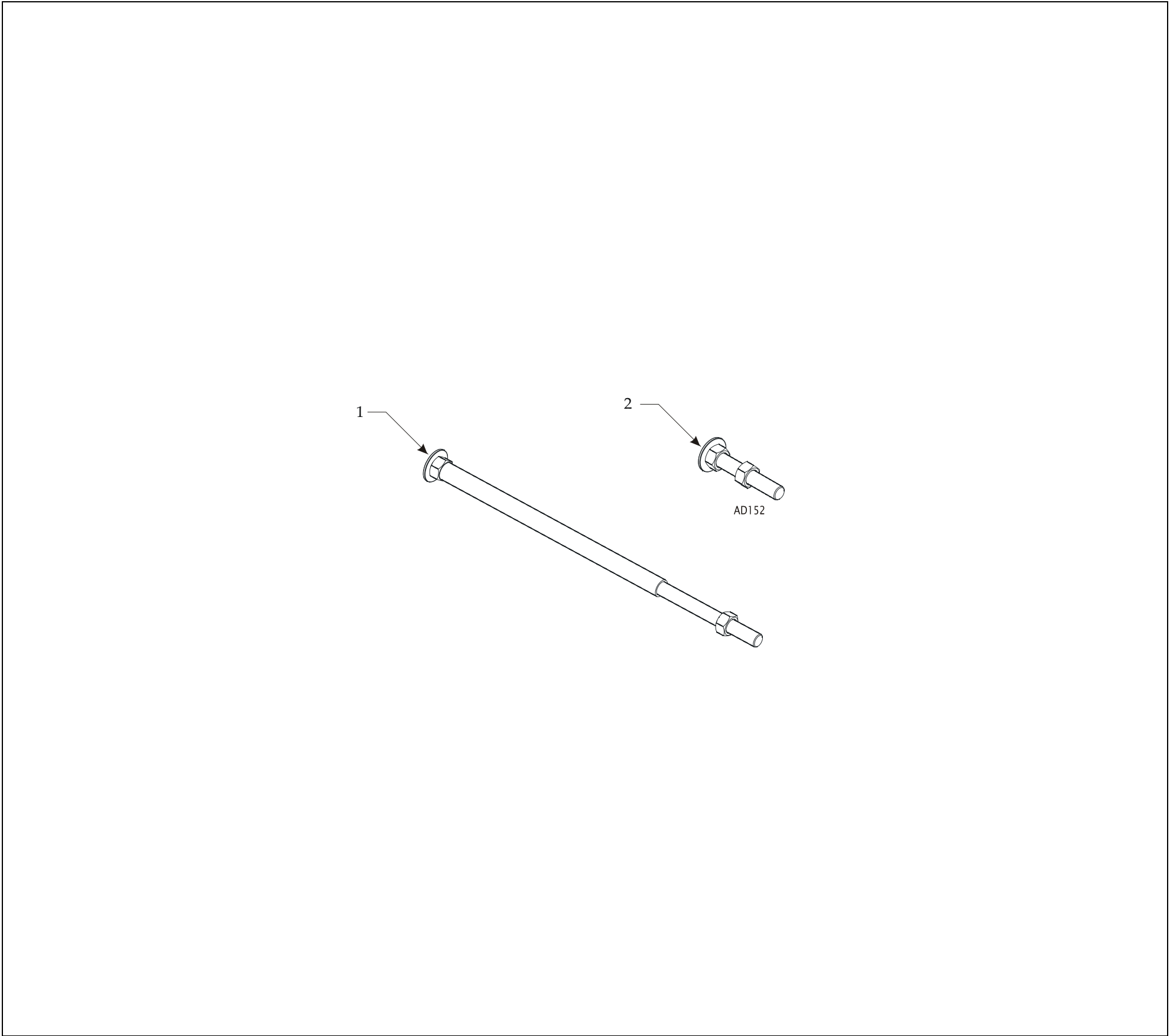
248H-102 DYNOJET 48" HI INERTIA DYNO		
1	145300001	REGULATOR,WITH BOWL, 1/4 NPT
2	145800001	GAUGE, PRESS, 100 LB.
3	21696200	BASE MOUNTING BRACKET (2)
4	2A092	CHOCK, RUBBER (4)
5	30AS21	AXLE STRAP, 10M#, 21", WITH PROSL (4)
6	500-C10	CAR TIE DOWN 2" X 10' (4)
7	500-C10W/S	CAR TIE DOWN, HI-PERF, 2" X 10' (2)
8	76199001	BASIC MODULAR ELECTRICAL SUB-ASSEMBLY INCLUDES: A) 318110301PWR CORD, 125V, 10A; B) 42924090 MONITOR CABLE, 9M/9F, 10'; C) 42924250 MONITOR CABLE, 25M/ 25F, 25'; D) 54210020 FUSE, 1/4A, 250V, 5MM X 20MM; E) 54210100 FUSE, 1 AMP, 250V, 5X20MM; F) 54210300 FUSE, 3A, 250V, 5X20MM, FA; G) 65291001 PCB, DYNO-BREAKOUT, LOADED; H) 761900001 PWR SUPPLY; I) 76199003N HARDWARE STACK
9	98118103	USER GUIDE, WINPEP 7 SOFTWARE-GENERIC
10	DC100-104	PENDANT & CABLE, CAR DYNO
11	DE100-109S	INDIRECT SECONDARY P-U, SHIELDED, 20' (2)
12	DE100-110L	INDIRECT P/UP PRIMARY CLIP (1) AUTO
13	A10Z 2-304A	BUMPER, 3/8 X 1/2L (4)
14	141900001	FITTING 10006B-104
15	31616200	REGULATOR MOUNTING BRACKET
THE FOLLOWING ITEMS ARE NOT SHOWN:		
81148200	248H GENERIC CAR DYNO, SEE PAGE 2	
197104130	4" ZIP TIE (4)	
D706	BANNER DYNOJET - 2' X 10'	
D790	BANNER, DYNOJET/NASCAR	
D791	DECAL, DYNOJET/NASCAR (4)	
37401060	RIVET, 1/8" X 3/16", BLIND, ALUMINUM (2)	
98198104	WINPEP INSTALL SOFTWARE-CD	
36560834	SCREW, 1/4-20 X 1/2, BUTTON HEAD (2)	
36643100	WASHER, #8, FLAT, STEEL (4)	
98119101	MAINTENANCE GUIDE, AUTO DYNO'S	
66954001	CABLE, DRUM/DATA ACQ, 24"	
DC100-107	PICKUP PCB, CAR DYNO	
248HS-102 248 Car Dyno, High Speed 48" uses:		
81148300	248-HIGH SPD GENERIC CAR DYNO, SEE PAGE 3	



248 CAR DYNO, WIDE

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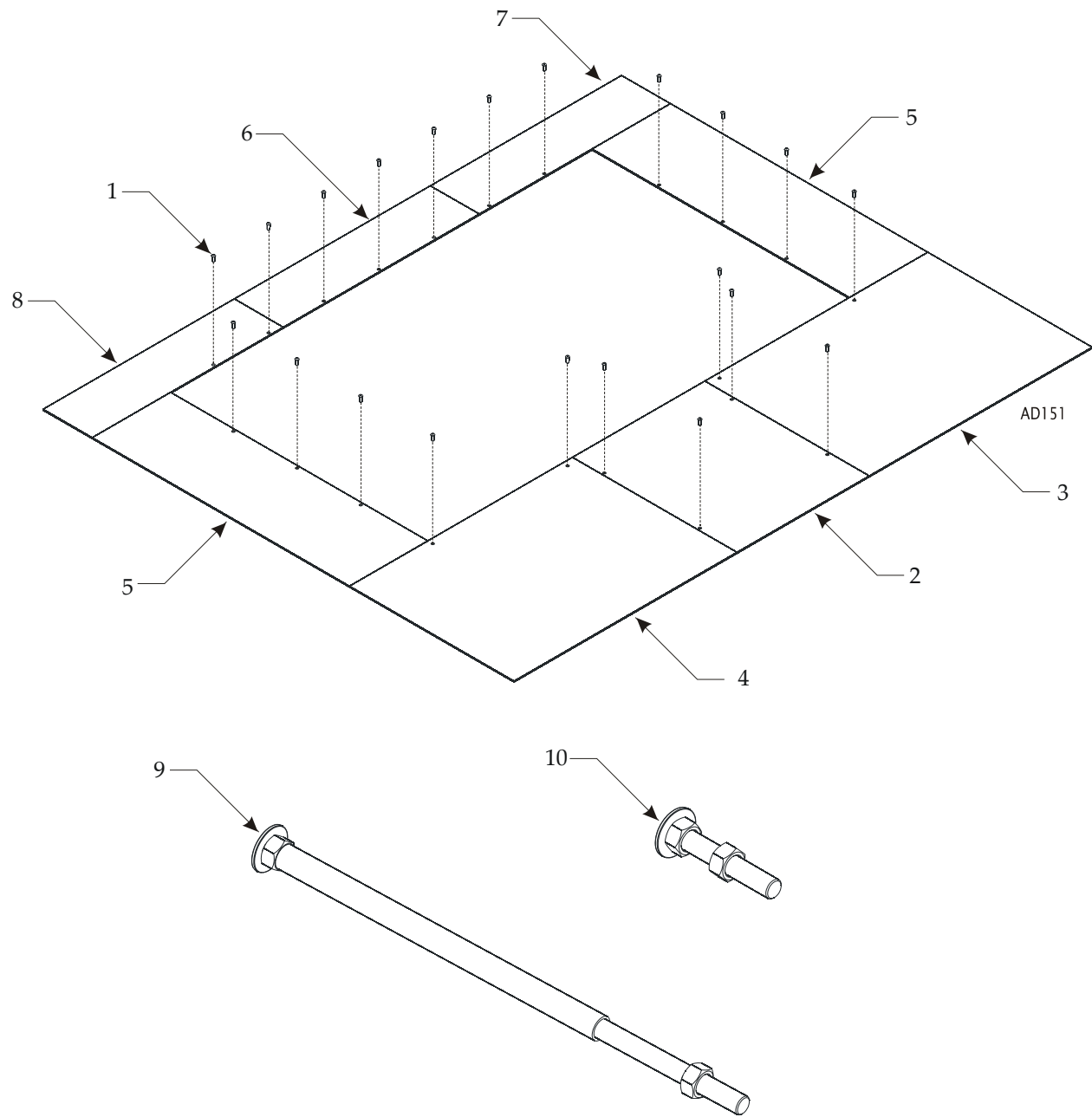
- 248HW-102 = 248 Car Dyno, Wide
- Similar to the 248H-102, but uses:
- | | | |
|---|----------|---------------------------------------|
| 1 | C2005 | LATERAL SUPPORT-LONG,248 (2) |
| 2 | C2006 | LATERAL SUPPORT-SHORT,248 (2) |
| | ANCHOR | BOLT, ANCHOR, 1" X 20" (6) |
| | 81148400 | 248HW GENERIC DYNAMOMETER, SEE PAGE 3 |
| | 97430120 | SIGN, DO NOT EXCEED 750LBS (3) |
| | 97436120 | SIGN, 180MPH/10M AXLE WGT (2) |



248/248-4WD DYNO

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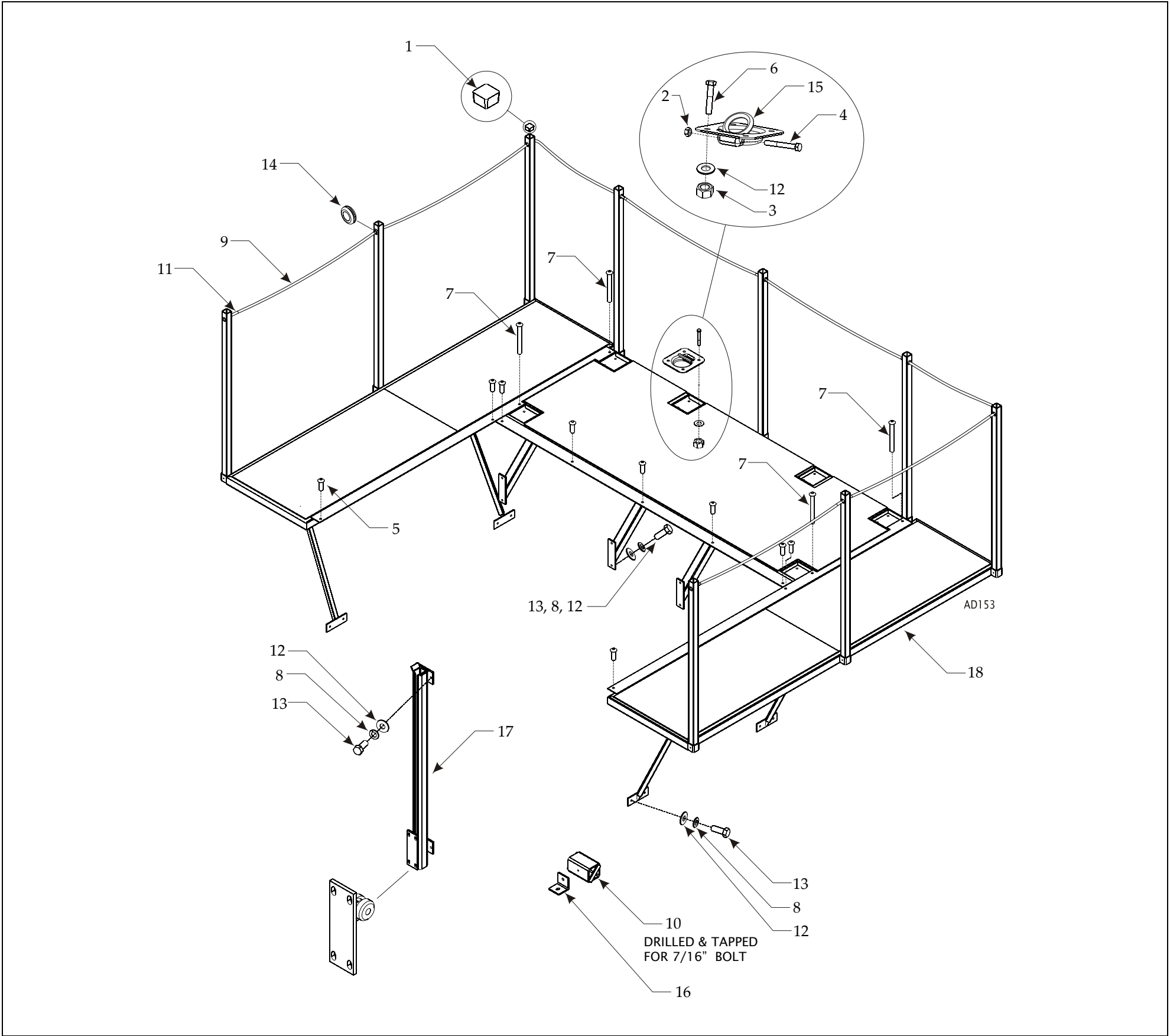
248-4WD 248/248-4WD Dyno		
THE FOLLOWING ITEMS ARE NOT SHOWN:		
37401060	RIVET, 1/8" X 3/16", BLIND, ALUMINUM (2)	
248-4WD	248 4-WHEEL DRIVE DYNO KIT	
248H-102	DYNOJET 48" HI INERTIA DYNO	
81148100	248-4WD GENERIC DYNAMOMETER	
D791	DECAL, DYNOJET/NASCAR (4)	
248-107	COVER ASSEMBLY, CAR DYNO, SM (includes 36581634 bolts, 3/8-16 x 1", bh, allen (21), 61215100 pit cover sub-assmembly - 248, 78119001 248 pit mounting kit)	
1	36581634	BOLT, 3/8-16 X 1", BUTTON HEAD, ALLEN (21)
61215100 PIT COVER SUB-ASSMEMBLY - 248 INCLUDES:		
2	2481071	COVER-PIT, CENTER BRAKE SIDE
3	24810721	COVER-PIT, RIGHT BRAKE SIDE
4	24810731	COVER-PIT, LEFT BRAKE SIDE
5	2481074	COVER-PIT, SIDE (2)
6	2481075	COVER-PIT, NONBRAKE SIDE, MIDDLE
7	2481076	COVER-PIT, NONBRAKE SIDE, RIGHT
8	2481077	COVER-PIT, NONBRAKE SIDE, LEFT
78119001 248 PIT MOUNTING KIT INCLUDES:		
9	C2005	LATERAL SUPPORT, LONG, 248 (2)
10	C2006	LATERAL SUPPORT, SHORT, 248 (2)
	LOCKWASHER	1" BUSHINGS (3) (not shown)
	1" NUT	1" HEX NUT (9) (not shown)
	1" WASHER	WASHER, FLAT, 1" (6) (not shown)
	ANCHOR	BOLT, ANCHOR, 1" X 20" (3) (not shown)
	37518200	REDHEAD ANCHOR INSTALLATION TOOL(not shown)
	79190001	GROUND HOOK KIT (10)(not shown)
	98210102	REDHD ANC. INST. INSTR. (not shown)
	98219100	INSTALLATION INSTR., AUTO PIT



PLATFORM RAILING, CAR DYNO

- C-105 Platform Railing, Car Dyno**
- 1 35521230 SQUARE-PLUG, 1-1/2" X 5/8", BLACK (9)
- 2 36478100 NUT, 5/16-18, NYLOCK-HEX (6)
- 3 36488100 NUT, 3/8-16, NYLOCK (45)
- 4 36574070 BOLT, 5/16-18 X 2-1/2", GRD8 (6)
- 5 36581634 BOLT, 3/8-16 X 1", BUTTON HEAD, ALLEN (9)
- 6 36583270 BOLT, 3/8-16 X 2", HEX (24)
- 7 36584834 BOLT, 3/8-16 X 3", BUTTON HEAD-ALLEN (4)
- 8 36932100 WASHER, 3/8, SPLITLOCK, STEEL (18)
- 9 39210001 CHAIN,TWISTED-LINK.2/0 27.25 FT.
- C10583 WELDED CHAIN END-2
- 10 C-1054 DYNO SPACER, 248 (4) (welded to frame)
- 11 C10582 TAPPED CHAIN END-1
- 12 DM150-011-002 3/8" FLAT WASHERS (44)
- 13 DM150-019-012 BOLT, 3/8-16 X 1", HEX (24)
- 14 DM150-033RUBBER GROMMET (18)
- 15 248-112 TIE DOWN, RECESSED (6)
- 61119190 CATWALK & HARDWARE SUB-ASSM INCLUDES:
- 16 21917100 FOOT, 248/224/KART (4)
- 17 71311000 KIT, 4 POST LIFT INTERFACE
- 18 C-105UNF CATWALK, UNPAINTED

- THE FOLLOWING ITEMS ARE NOT SHOWN:
- 26142091 SPACER, ABOVE GROUND 248 (24) (welded to frame)
- 98219101 INSTALLATION INSTRUCTIONS, AUTO ABOVE-GND
- 30AS72 AXLE STRAP, 10M#, 6', W/PROSL (2)
- 36588070 BOLT, 3/8-16 X 5", HEX (2)
- 36708100 NUT, 1/2-13, NYLOCK-HEX (4)
- 36803640 BOLT, 1/2-13 X 4-1/2", HEX (4)
- 36942100 WASHER, 1/2, SPLITLOK, STEEL (4)
- 36943100 WASHER, 1/2", FLAT, STEEL (4)
- 36583670 BOLT, 3/8-16 X 2-1/4", HEX (9)
- BR102-058 1/2-13 X 1" BOLT (4)



CAR DYNO SIDE ENCLOSURE KIT
.....

- 248-104 Car Dyno Side Enclosure Kit**
- 1 248-104-1 COVER, CAR SIDE, BR CTR
 - 2 248-104-2 COVER, CAR SIDE, BRK SD END (2)
 - 3 248-104-3 COVER, CAR SIDE (2)
 - 4 248-104-4 COVER, CAR SIDE, NON-BRK

THE FOLLOWING ITEMS ARE NOT SHOWN:

- 36560834 SCREW, 1/4-20 X 1/2", BUTTON HEAD (60)
- 97437060 STICKER, DYNOJET, 18.75 X 3, BLACK (2)

- 78113001 High Speed Dyno Side Cover Kit, 248HS-102**
- 5 21219503 SIDE COVER-ABOVE GROUND, 248HS-102 (2)
 - 248-104-1 COVER, CAR SIDE, BR CTR
 - 248-104-2 COVER, CAR SIDE, BRK SD END(2)
 - 248-104-3 COVER, CAR SIDE
 - 248-104-4 COVER, CAR SIDE, NON-BRK
 - 36560834 SCREW, 1/4-20 X 1/2", BUTTON HD (70) (not shown)
 - 97436070 SIGN-SPEED WARNING, H-SPD CAR (2) (not shown)
 - 97437060 STICKER, DYNOJET, 18.75 X 3, BLACK (2) (not shown)

